①

$$\int_{-1}^{5} \frac{x^3}{3} - \frac{4x^2}{2} - 5x + c$$

$$\left(\frac{x^3}{3} - 2x^2 - 5x + c\right)$$

$$\frac{5}{3} - 2(5)^2 - 5(3) - \left[\frac{(-1)^3}{3}\right) - 2(-1)^2 - 5(-1)$$

$$\frac{125}{3} - 50 - 25\left[\frac{-1}{3} - 2 + 5\right]$$

$$\frac{125}{3} - 15 - \left[\frac{-1}{3} + 3\right]$$

$$\frac{125}{3} - \frac{225}{3} - \left[\frac{1}{3} - \frac{9}{3}\right] \rightarrow \frac{100}{3} + \frac{10}{3} = \boxed{\frac{110}{3}}$$

②

$$\int_{-4}^{5} -x + 2\frac{d}{dx} = -\frac{x^2}{2} + 2x + c$$

$$-\frac{5}{2}^2 + 2(5) \cdot \left[-\left(\frac{-4}{2}\right)^2 + (-4)\right]$$

$$\frac{25}{2} + 10 - \left[\frac{16}{2} - 8\right] = \frac{25}{2} + \frac{20}{2}\left[\frac{16}{2} - \frac{16}{2}\right]$$

$$-\frac{5}{2} + \frac{32}{2} \quad \frac{27}{2}$$

③

$$\int_{-4}^{0} x^2 + 8x + 12 \frac{d}{dx}$$

$$\int_{-4}^{0} \frac{x^3}{3} + 4x^2 + 12x + c$$

$$\int_{-4}^{0} \frac{x3}{3} + \frac{8x^2}{3} + \frac{8x^2}{2} + 12x + c \qquad \frac{(0)^3}{3} + 4(0)^2 - 12(0) - \left(\frac{-4}{3}\right)^3 + 4(-4)$$

$$\left(\frac{64}{3} + \frac{192}{3} - \frac{144}{3}\right) \left\{\left[\frac{+16}{3}\right]\right.$$

GeoGebra Clásico

geogebra.org/classic?lang=es

$f(x) = x^2 + 8x + 12$

$a = \text{SumaInferior}(f, -4, 0, 100)$

$= 5.01$

GeoGebra Clásico

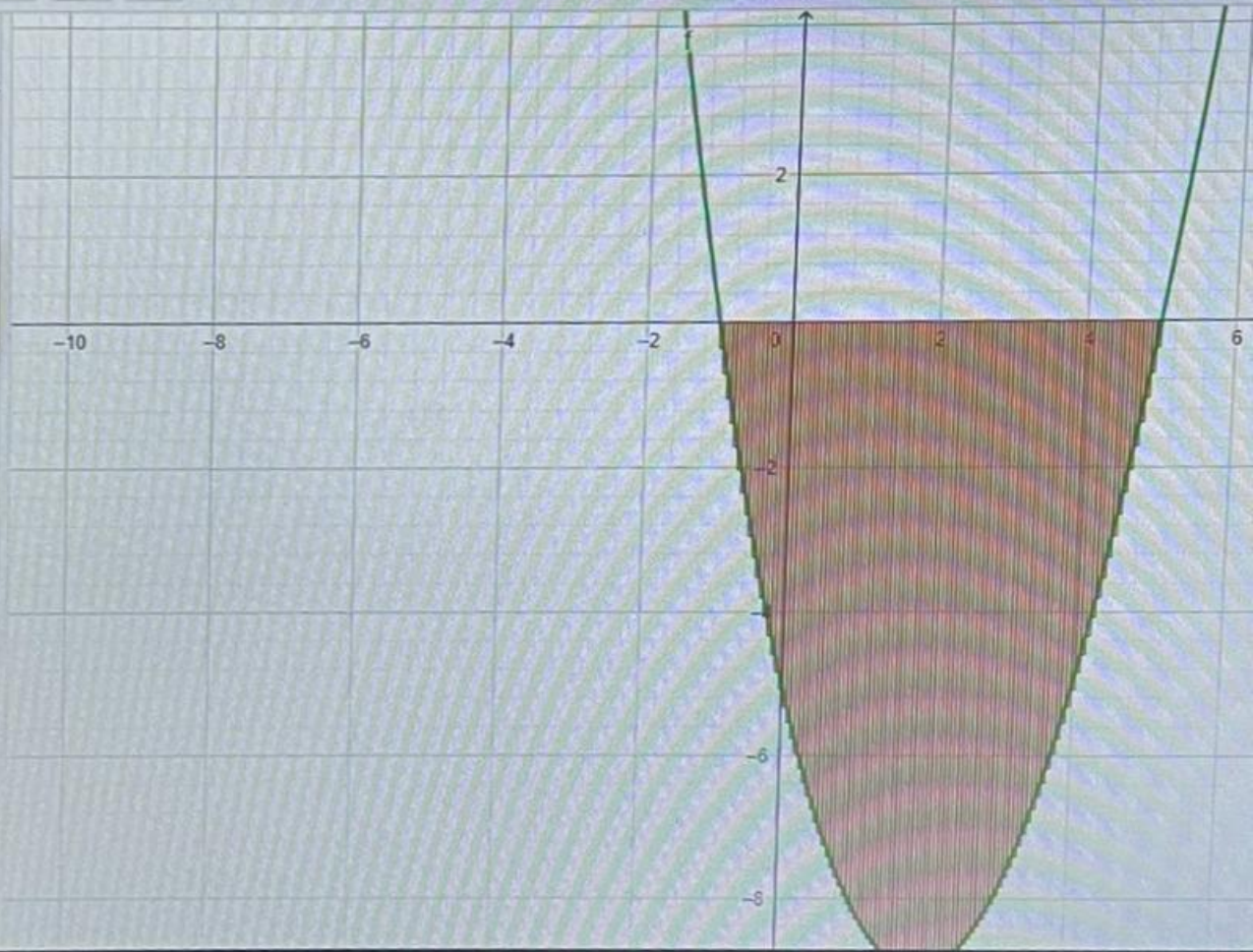
geogebra.org/classic?lang=es

$f(x) = x^2 - 4x - 5$

SumaInferior(f, −1, 5, 100)

= −36.54

SumaInferior(Función, Extremo inferior del intervalo, Extremo superior del intervalo, **Número de rectángulos**)



SAMSUNG

GeoGebra Clásico

geogebra.org/classic?lang=es

$f(x) = -x + 2$

$a = \text{SumaInferior}(f, -4, 5, 100)$

$= 13.1$

Entrada...